

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

Current Speed and Direction

1.2. Summary description of the data:

Monthly and annual U and V vectors were summarized for 14 unique depth levels from daily means using the HYCOM and NCODA Global 1/12° Reanalysis. The U vector (m/s) is to the East and the V vector (m/s) is to the North. Current magnitude (m/s) was calculated using the daily U and V vectors.. Descriptive statistics of mean, variance, standard deviations, minimum, and maximum were calculated for each month from the twenty years of data using the daily means (1992-2012). Mean, variance, and, standard deviation was calculated for the annual summary (1992-2012). The mean direction in degrees (with 0° = North) was calculated from the summarized U and V vector means, and represents the direction that the current is moving toward. The 1/12 degree global HYCOM+NCODA Ocean Reanalysis was funded by the U.S. Navy and the Modeling and Simulation Coordination Office. Computer time was made available by the DoD High Performance Computing Modernization Program. The output is publicly available at <http://hycom.org>.

1.3. Is this a one-time data collection, or an ongoing series of measurements?**1.4. Actual or planned temporal coverage of the data:****1.5. Actual or planned geographic coverage of the data:**

W: -179.919999, E: 179.920001, N: 74.64, S: 14

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys,

enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2018-08-01 00:00:00 - (1) A daily snapshot (1200 hours data file) of the HYCOM + NCODA Global 1/12° Reanalysis data was downloaded from the HYCOM website in NetCDF format. The data range spanned from 10/2/1992 to 12/31/2012. Global temperature, salinity, u and v grids were extracted from the daily HYCOM NetCDF files for each of the available z-levels (depth). A current magnitude grid was created for each u/v grid. Mean, minimum, maximum, variance and standard deviation grids were calculated for each variable-depth-month combination by combining all of the daily files for each variable-depth-month (e.g. temperature-40m-January). Mean, minimum, maximum, and standard deviation were also calculated by combining daily files across the entire time span (annual). (2) Data were extracted from netCDF files and stored in CSV files for each variable, statistic, and depth level (38 depth levels) (3) 14 unique depth levels were created as values were identical (2-125, 150-250, 300-350, 400-500, 600, 700, 800, 900-1000, 1250, 1500, 2000, 3000, 4000, 5000) and stored in a single CSV. (4) CSVs for each statistic (mean, min, max, var, stdev) were combined into a single csv file for each month. (Therefore each variable has 12 monthly CSV and 1 annual CSV.) Note: for annual no min or max statistics were generated. (5) All CSV files were exported as feature datasets. (6) Direction in degrees was calculated from U and V mean vectors (not calculated for max, min, std, var). Direction is the direction the current is moving to. (7) All CSV files were clipped by the U.S. Exclusive Economic Zone (EEZ). (8) Any record with Null for all Depth levels was removed. (9) Feature classes were projected into WGS 1984 World Mercator.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.3. Is this a one-time data collection, or an ongoing series of measurements?

- 1.4. Actual or planned temporal coverage of the data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
 - 7.1.1. If data are not available or has limitations, has a Waiver been filed?
 - 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.2. Data storage facility prior to being sent to an archive facility
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

<https://www.fisheries.noaa.gov/inport/item/55353>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with

limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Office for Coastal Management (OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

ftp://ftp.coast.noaa.gov/pub/MSP/ORT/

https://coast.noaa.gov/

https://coast.noaa.gov/arcgis/rest/services/OceanReportingTool/CurrentMagnitudeDirection/MapServ

7.3. Data access methods or services offered:

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.